Dell Computer Corporation Issues/concerns with monitor MOU first Draft. Basic summary.

# **Energy Issues discussed**:

<u>Power on Consumption</u>: The most critical part of new Requirements:

At issue:

Method of rating pixels/watt = May be very difficult to manage this since most products may all fall into a narrow power consumption range. At the minimum some sort of adjustment could be made for luminance output. Pixels/watt and luminance efficiency. Both should be good numbers.

Actual power consumption numbers:

This will eliminate CRT products

Test method:

Not defined properly and therefore no way to get repeatable results. Cheating or tweaking could be done by some vendors. This Could put large corporations like DELL at a disadvantage to smaller vendors because we would be forced to specify power consumption conservatively. As we do with FCC EMI numbers.

Action: totally revise numbers and create good test methods (very difficult to do reliably and could take some time)

Preferred action: Eliminate On power requirement.

### Sleep Mode Power Consumption:

At issue: reduced to 4 watts and resume time 5 seconds.

Action: remove resume time or make it longer. CRTs will have a difficult time with this. Clarify test methods of resume compliance exactly.

Note: Sleep mode in LCDs may be same as off mode, therefore 5 sec. May not be enough if you are to be below 2 watts!

### Off mode:

No issue: 2 watts

EPA will harmonize with Executive order FEMP standby power req. We like this!

However, I was unable to get a comfortable feeling EPA has a Handle on how to Measure this power. Will need to measure energy over time and convert to average power consumption. Need to specify this clearly and find equipment capable of these measurements.

#### Non Energy Issues:

Please let companies compete for sales of their products. Cost and performance are always tradeoffs. Some markets will allow LCDs with less performance in order to get the cost advantage. We would like to see some low cost LCDs make

the E-Star list too, lower luminance means lower power consumption and that it's a win-win for all.

# Brightness Minimum Luminance of 100 nits:

Issue: Too Bright especially for CRTs, Poorly defined measurements for LCDs

Action: Delete
Contrast: 200 to 1

Issue: Too High for the measurement employed Most LCDs are above 250

anyway but measurement may be different than EPA MOU defines.

Action: Delete

Bright Pixel defects 5 Max.

Though Industry standard It can be defined in many different ways, resulting in different interpretations. (½ brite dots ect.) When panel shortages subside some companies will demand 0 brite dots because of customer satisfaction issues.

This will be independent of E-Star.

Action: Delete

2 year warranty Mandate

Action: Delete, let manufactures decide how to market their products. Extended warranties generate Revenue for Vendors. And the customer can choose to spend the money if he wants too. This will add cost to existing products.

<u>Grandfathering</u>: No products may carry E-Star label once the new MOU is in effect.

Unreasonable to expect companies to be able to flush out current products in a short period of time.

Action: Delete.

#### Other Issues Include:

Logo labeling, Product packaging and Literature.

15 Minute time out for displays. Displays are a slave to computer they cannot power down by themselves. This issue Belongs with system.

### **End of summary**

Respectfully submitted by Joe Goodart 5-13-02